Annual Drinking Water Quality Report

July 1, 2008

City of Rockville • Dept. of Public Works • Environmental Management Division **PWS ID No. 0150003**

The City of Rockville is pleased to present the 2007 Annual Drinking Water Quality Report. This report is designed to inform you about the quality of City water and opportunities you have to participate in important community drinking water decisions. Rockville provides water to approximately 46,500 people that live or work in the City. Another 10,000 Rockville residents get their water from the Washington Suburban Sanitary District (WSSC). WSSC will be issuing a separate consumer report for residents on their system.

Rockville's goal is to provide the City residents and businesses we serve with a safe and dependable supply of water. During 2007, Rockville water met all of the drinking water health standards established by the U.S. Environmental Protection Agency and the Maryland Department of the Environment. Rockville will continue to meet this obligation in the face of significant population and job growth expected by the City. In fact, our ability to provide an ample supply of clean water is one of the many reasons why Rockville attracts new people and companies to the City.

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Para mas información sobre la calidad de agua que usted consume, llame 240-314-8500.

Is my water safe?

Yes, Rockville water is very safe. This report is a snapshot of the city's drinking water quality during 2007. Included in this report are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. In 2007, we tested the water for over 80 different potential contaminants. Many of these tests did not find even a trace amount of the contaminant in the water.

Do I need to take special precautions?

The general population should not be concerned about consuming Rockville's water. However, some people may be more vulnerable to contaminants in drinking water than others. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from any source from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available by calling the Safe Water Drinking Hotline: 800-426-4791.

Where does my water come from?

Our primary source of water is the Potomac River. When the City water plant is not operating because of necessary improvements or maintenance activities, or in cases of regional drought, Rockville purchases water from the Washington Suburban Sanitation Commission (WSSC). In 2007, Rockville purchased over 3.645 million gallons of water (about 0.2 %) from WSSC, which also gets its water from the Potomac River.

Source water assessment and its availability:

The Maryland Department of the Environment (MDE) performed a source water assessment several years ago. Copies of this assessment may be obtained by contacting the Water Supply Program at MDE located at 1800 Washington Blvd, Baltimore, Maryland 21230, 410-537-3702. For more information on the Maryland Source Water Protection Program see www.mde.state.md.us/Programs/WaterPrograms/Water_Supply/sourcewaterassessment/index.asp

Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

- Microbial contaminants, such as viruses and bacteria, come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;
- Pesticides and herbicides come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and

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- Radioactive contaminants, can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Definitions Used in this Report

Unit Descriptions are as follows:

TERM	DEFINITION
PPM or MG/L	Parts per million, or milligrams per liter (mg/L). 1 ppm is the same as one drop in 10 gallons of water.
PPB	Parts per billion, or micrograms per liter (µg/L). 1 ppb is the same as one drop in 10,000 gallons of water.
NTU	Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
% positive samples/month	Percent of samples taken monthly that were positive.
NA	Not applicable.
ND	Not detected (by a test procedure).
NR	Monitoring not required, but recommended.

Other Important Drinking Water Definitions:

TERM	DEFINITION
MCLG	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which no health risk is known or expected. MCLGs ensure a margin of safety for sensitive indiviuals.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
MRDLG	Maximum residual disinfection level goal. The level of a drinking water disinfectant below which no health risk is known or expected. MRDLGs do not reflect the benefits of using disinfectants to control microbial contaminants.
MRDL	Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	Monitored Not Regulated.
MPL	Maximum Permissible Level (as assigned by MDE).

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Note: Reported levels are maximum values unless otherwise indicated.

CONTAMINANTS	MCLG OR MRDLG	MCL, TT OR MRDL	TEST RESULTS	RANGE LOW	RANGE HIGH	SAMPLE YEAR	IS THIS A VIOLATION?	TYPICAL SOURCE
DISINFECTANTS & DISINFECTION BY-PRODUCTS*								
Haloacetic Acids HAA5) (ppb)	NA	60[1]	34.07	21.2	80	2007	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80[2]	34.56	17	69.5	2007	No	By-product of drinking water disinfection
INORGANIC CONTAMINANTS								
Barium (ppm)	2	2	0.036	NA	—	2007	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

*There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

[1] This HAA value is an annual average of all tests taken during the year.

[2] This TTHM value is an annual average of all the tests taken during the year.

CONTAMINANTS	MCLG OR MRDLG	MCL, TT OR MRDL	TEST RESULTS	RANGE LOW	RANGE HIGH	SAMPLE YEAR	IS THIS A VIOLATION?	TYPICAL SOURCE
INORGANIC CONTAMINANTS *Continued…*								
Fluoride (ppm)	4	4	0.7	0.1	1.3	2007	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	1.7	NA	–	2007	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
MICROBIOLOGICAL CONTAMINANTS								
Total Coliform (% positive samples/month)	0	5	0	NA	–	2007	No	Naturally present in the environment
Turbidity (NTU)**						2007	No	Soil runoff

**100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation.
The highest single measurement was 0.25. Any measurement in excess of 1 is a violation unless otherwise approved by the state.

CONTAMINANTS	MCLG	AL	TEST RESULTS	SAMPLE YEAR	# SAMPLES EXCEEDING AL	EXCEEDS AL	TYPICAL SOURCE
SYNTHETIC ORGANIC CONTAMINANTS *including pesticides and herbicides*							
Atrazine (ppb)	3	3	0.48	0.1	0.48	2007	No	Runoff from herbicide used on row crops
Di (2-ethylhexyl) phthalate (ppb)	0	6	1	NA	1	2007	No	Discharge from rubber and chemical factories
Simazine (ppb)	4	4	0.2	–	0.2	2007	No	Herbicide runoff
INORGANIC CONTAMINANTS							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.1	2007	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	3	2007	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Additional Contaminants

In an effort to insure the safest water possible the State has required us to monitor some contaminants not required by Federal regulations. Of those contaminants only the ones listed below were found in your water.

CONTAMINANTS	STATE MCL	TEST RESULTS	IS THIS A VIOLATION?	EXPLANATION AND COMMENT
Chloroform	NA	26 PPB	No	
Atrazine	3 PPB	0.48 PPB	No	
Dibromochloromethane	NA	1.3 PPB	No	
Bromodichloromethane	NA	10 PPB	No	
Simazine	4 PPB	0.2 PPB	No	

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Undetected Contaminants

The following contaminant was monitored for, but not detected, in your water.

CONTAMINANTS	MCLG OR MRDLG	MCL OR MRDL	TEST RESULTS	IS THIS A VIOLATION?	TYPICAL SOURCE
INORGANIC CONTAMINANT					
Arsenic (ppb)	0	10	ND	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes

For more information

For additional information, please contact Vernon Simmons, Water Plant Superintendent, by phone at 240-314-8555, or by email at vsimmons@rockvillemd.gov.

Our primary method of distributing this report is through the *Rockville Reports,* the City's monthly newsletter. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. It will also be posted online at www.rockvillemd.gov.

This report is required by the United States Environmental Protection Agency and the Maryland Department of the Environment.

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